

IN THE CLAIMS

1-9 (withdrawn)

10. (currently amended) A microarray of polypeptides of claim 31 produced by the method of:

(a) loading an aqueous solution of a selected polypeptide of at least 50 amino acids in length in a reagent-dispensing device having an elongate capillary channel adapted to hold a quantity of the reagent solution and having a tip region at which the solution in the channel forms a meniscus,

(b) tapping the tip of the dispensing device against a surface of a planar solid support at a defined position, with an impulse effective to break the meniscus in the capillary channel and deposit a selected volume between 0.002 and 2 nl of solution on the surface of the planar solid support, and

(c) repeating steps (a) and (b) until said microarray is formed.

11-12 (canceled)

13. (previously amended) The microarray of polypeptides according to Claim 10, wherein said polypeptides are immunological receptors.

14. (previously amended) The microarray of polypeptides according to Claim 13, wherein said immunological receptors are antibodies.

15. (previously amended) The microarray of polypeptides according to Claim 10, wherein said polypeptides are antigens.

16. (previously amended) The microarray of polypeptides according to Claim 10, wherein said planar solid support comprises a cationic film which binds said polypeptide.

18. (previously amended) The microarray of polypeptides according to Claim 10, wherein said polypeptides retain the binding properties of the native polypeptide conferred by the three-dimensional structure.

19-30 (canceled)

31. (presently amended) A microarray of discrete polypeptides on a planar solid support, wherein each polypeptide is of at least 50 amino acids in length and wherein said microarray comprises ~~400~~ 1000 or more discrete regions of distinct polypeptide per cm² of planar solid support.

32 (canceled)

33. (previously added) The microarray of polypeptides according to Claim 31, wherein said polypeptides are immunological receptors.

34. (previously added) The microarray of polypeptides according to Claim 33, wherein said immunological receptors are antibodies.

35. (previously added) The microarray of polypeptides according to Claim 31, wherein said polypeptides are antigens.

36. (previously added) The microarray of polypeptides according to Claim 31, wherein said planar solid support comprises a cationic film which binds said polypeptide.

37. (previously added) The microarray of polypeptides according to Claim 31, wherein said polypeptides retain the binding properties of the native polypeptide conferred by the three-dimensional structure.

38. (new) A microarray consisting essentially of a planar solid support comprising 1000 or more discrete regions of distinct polypeptides per cm², wherein each polypeptide is of at least 50 amino acids in length.

39. (new) The microarray according to Claim 38, wherein said microarray comprises at least 1000 discrete regions of distinct polypeptides.

40. (new) The microarray according to Claim 39, produced by the method of:

(a) loading an aqueous solution of a selected polypeptide of at least 50 amino acids in length in a reagent-dispensing device having an elongate capillary channel adapted to hold a quantity of the reagent solution and having a tip region at which the solution in the channel forms a meniscus,

(b) tapping the tip of the dispensing device against a surface of said solid-material slide at a defined position, with an impulse effective to break the meniscus in the capillary channel and deposit a selected volume between 0.002 and 2 nl of solution on the surface of said solid-material slide, and

(c) repeating steps (a) and (b) until said microarray is formed.